

**WE CLAIM:**

1. A valve comprising:  
a valve body defining an interior cavity in communication with a first fluid passage and a second fluid passage, the volume of the cavity is  
5 substantially equally distributed about a central axis;  
a tubular throttling cage in the cavity and in communication with the first fluid passage, the tubular throttling cage having a plurality of flow ports arranged about a perimeter of the throttling cage, wherein fluid flows between the first fluid passage and the second fluid passage through the throttling  
10 cage, and wherein a longitudinal axis of the throttling cage is positioned offset from the central axis of the cavity; and  
a plug closely received in the throttling cage and moveable about the longitudinal axis to selectively cover the flow ports thereby restricting flow between the first fluid passage and the second fluid passage.
- 15 2. The valve of claim 1 wherein the throttling cage is offset in the cavity away from the second fluid passage.
3. The valve of claim 1 wherein an annular volume between the throttling cage and a wall of the cavity is smallest in an area of the cavity opposite the second fluid passage.
- 20 4. The valve of claim 1 wherein at least one of the flow ports facing the second fluid passage is larger than at least one of the other flow ports
5. The valve of claim 1 wherein a flow port facing the second fluid passage is larger than any of the other flow ports.
- 25 6. The valve of claim 1 wherein the flow ports are angled towards the second fluid passage.

7. The valve of claim 6 wherein the flow ports pass substantially straight through the throttling cage.

8. The valve of claim 1 wherein the throttling cage has a triangular flow splitter.

5 9. The valve of claim 8 wherein the triangular flow splitter is in the portion of the throttling cage opposite the second fluid passage.

10. The valve of claim 1 wherein the throttling cage is substantially sealed to the valve body.

10 11. A fluid flow control device, comprising:  
a flow body having a internal chamber;  
a first fluid passage intersecting the chamber;  
a second fluid passage intersecting the chamber;  
a tubular member residing in the internal chamber, the tubular member having being in communication with the first fluid passage and having a  
15 plurality of lateral ports; and  
a plug adapted for movement in an interior of the tubular member to selectively cover a portion of the ports;  
wherein an annular volume between the tubular member and the flow body is smallest opposite the second fluid passage.

20 12. The fluid flow control device of claim 11 wherein at least one of the lateral ports is larger than the other lateral ports.

13. The fluid flow control device of claim 11 wherein a lateral port facing the second fluid passage is larger than at least one of the other lateral ports.

25 14. The fluid flow control device of claim 11 wherein the lateral ports are angled towards the second fluid passage.

15. The fluid flow control device of claim 14 wherein the lateral ports pass substantially straight through the tubular member.

16. The fluid flow control device of claim 11 wherein two adjacent lateral ports form a triangular flow splitter in the tubular member.

5 17. The fluid flow control device of claim 16 wherein a lateral port opposite the triangular flow splitter is larger than at least one of the other lateral ports.

18. A throttling cage for a globe valve, comprising:  
a tubular body having a plurality of laterally oriented flow ports, the flow  
10 ports being substantially straight passages through the tubular body, wherein one of the ports directs flow in a first direction, and at least one other port is angled to direct flow towards the first direction.

19. The throttling cage of claim 18 wherein one of the flow ports is larger than the other flow ports.

15 20. The throttling cage of claim 18 wherein at least one of the flow ports is larger than at least one of the other flow ports.

21. The throttling cage of claim 18 wherein two adjacent flow ports form a triangular flow splitter.

22. A valve comprising:  
20 a valve body defining an interior cavity in communication with a first fluid passage and a second fluid passage;  
a tubular throttling cage in the cavity having an open end in communication with the first fluid passage and a plurality of flow ports arranged about a perimeter of the throttling cage, the flow ports being  
25 substantially straight passages through the throttling cage, wherein one of the flow ports directs flow in a first direction and at least one other ports is angled

to direct flow towards the first direction, and wherein fluid flows between the first fluid passage and the second fluid passage through the throttling cage; and

5 a plug closely received in the throttling cage and moveable in the throttling cage to selectively cover the flow ports thereby restricting flow between the first fluid passage and the second fluid passage.

23. The valve of claim 22 wherein at least one of the flow ports is larger than at least one of the other flow ports.

10 24. The valve of claim 22 wherein an annular volume between the throttling cage and a wall of the cavity is smallest in an area of the cavity opposite the second fluid passage.

25. A valve, comprising:  
a flow body having an internal chamber;  
an inlet intersecting the chamber;  
15 an outlet intersecting the chamber;  
a tubular member residing in the internal chamber, the tubular member in communication with the inlet and having a plurality of lateral ports in communication with the chamber; and  
a plug movable in an interior of the tubular member to selectively cover  
20 a portion of the ports; and  
wherein an annular volume between the tubular member and the flow body is smallest opposite the outlet.

26. The valve of claim 25 wherein a lateral flow port facing the outlet is larger than at least one of the other lateral flow ports.

25 27. The valve of claim 25 wherein at least two of the lateral ports are angled towards the outlet.

28. The valve of claim 25 further comprising a triangular flow splitter  
in the tubular member opposite the outlet.

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